

Application No.: 10/668736

Case No.: 58725US002

REMARKS

Claims 1-21 are pending. Claims 1, 11, 13, and 19 have been amended.

Examination and reconsideration of the application, as amended, is respectfully requested.

Support for amended claim 13 is found in the specification at page 20, lines 13-16.

§ 112 Rejections

Claim 11 stands rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which Applicants regard as the invention. Claim 11 has been amended to overcome the rejection. Support for this change is found in the specification at page 20, lines 13-16.

§ 102 Rejections

Claims 1, 5-7, and 11-18 stand rejected under 35 USC § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Hoopman et al. (U.S. Pat. No. 6,076,248) and also over Hoopman et al. (U.S. Pat. No. 5,681,217).

With respect to claim 1, claim 1 requires that the abrasive feature includes a base and a body extending from the base wherein the cross-sectional area of the body varies linearly with the height of the body from the base. Applicants submit that neither Hoopman et al. reference ('217 and '248) teach or suggest the subject matter of claim 1.

Referring to the specification on page 20, lines 8-13, and also to Figure 1B, a cross-sectional area A_c of the parallel plane is shown that varies proportionally with the height of the cutting plane as measured from the base (i.e., the cross-sectional area of the body varies linearly with the height of the body from the base). Applicants submit that there is no structure in Hoopman et al. that expressly or inherently has this feature. Further, there is no suggestion or motivation of providing such a structure.

As discussed on page 20, one of the results of using this geometry (i.e., the cross-sectional area of the body varying linearly with the height of the body from the base) is that it allows for a flatter cut rate compared to a feature having straight sidewalls, as measured over the life of the abrasive article. For the reasons given, claim 1 is patentable over the cited reference. Claims 5-7 and 11-14 depend from and further limit claim 1 and are patentable for at least the reasons given.

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Further, claim 15 is an independent claim that requires making an abrasive article having features that have a cross-sectional area of the body that varies linearly with the height of the body from the base. As discussed above with respect to claim 1, Hoopman et al. ('217 and '248) do not teach or suggest these elements of claim 15, and, therefore, claim 15 is likewise patentable. Claim 16-18 depend from and further limit independent claim 15 and are likewise patentable, for at least the same reasons.

§ 103 Rejections

Claims 2-4 and 8-10 stand rejected under 35 USC § 103(a) as obvious over Hoopman et al. (U.S. Pat. No. 6,076,248) and also over Hoopman et al. (U.S. Pat. No. 5,681,217).

Claims 2-4 and 8-10 depend from and further limit independent Claim 1, which was discussed above. For at least the same reasons that Claim 1 is patentable, Claims 2-4 and 8-10 are patentable.

Claim 19 stands rejected under 35 USC § 103(a) as obvious over Hoopman et al. (U.S. Pat. No. 6,076,248). Applicants submit that neither Hoopman et al. reference teaches an abrasive feature for an abrasive article including a base and a body projecting from the base where the body includes a vertex and further where the body is defined by four sidewalls and where further still each sidewall is defined by a parabolic section. Applicants submit that neither Hoopman et al. reference teaches or suggests either a body defined by four sidewalls or a sidewall defined by a parabolic section.

First, Applicants understand the Examiner's position, expressed during the interview, is that four sidewalls may be disclosed in Figure 3 of the Hoopman et al. ('248) reference. Applicants disagree that the cited figure shows four sidewalls, and in any event, there are not four distinct sidewalls disclosed or suggested. As described in the specification of the presently pending application, on pages 20, line 26, through page 21, line 7, in the context of this application, the sidewalls are distinct features with distinct boundaries, as is also seen in Figure 1. Note that Figure 1 shows a feature having sidewalls 131, 132, 133, and 134, which are distinct and separate from one another. In contrast, Figure 3 of Hoopman et al. ('248) does not show an abrasive feature having four distinct sidewalls (i.e. there are no distinct boundaries). On the contrary, reading

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Hoopman et al. in its totality, including from review of Figures 1, 2, 3, 4, and 10, it appears that the features disclosed have only a single sidewall.

Assuming *arguendo* that the cited figure does has four distinct sidewalls, Applicants submit that the features of Hoopman et al. do not have sidewalls that are defined by a parabolic section, as is required by claim 19.

For at least the reasons given, claim 19 is patentable over the cited reference.

Claims 20 and 21 depend from and further limit independent claim 19, which is patentable for the reasons discussed above. Therefore, claims 20 and 21 are patentable over the cited reference.

Provisional Rejections

Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 22-34 of copending Application No. 10/668,753. Applicants request that this rejection be held in abeyance until patentable subject matter is indicated.

Application No.: 10/668736Case No.: 58725US002**Interview Summary**

Applicants thank the Examiner for the interview given on October 12, 2004. Applicants agree with the Examiner's characterization of the Interview Summary, recorded in the Interview Summary sheet of the same date.

Application No.: 10/668736Case No.: 58725US002**Conclusion**

Claims 1-21 are presently pending. For the reasons given above, Applicants submit that Claims 1-21 are patentable and respectfully request the Examiner withdraw the rejections and issue a Notice of Allowance. Reconsideration is respectfully requested.

Respectfully submitted,

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Date

By: 

Gregory D. Allen, Reg. No.: 35,048

Telephone No.: (651) 736-0641

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833